

**ABSTRACT**

The present invention concerns the dynamics and yielding of transient solutions for the film-blowing process. After solving the governing equations that takes into consideration the viscoelasticity and cooling characteristics of the film, a coordinate transformation was done to change the free-end-point problem into a fixed-end-point one. Then finally, by introducing Newton's method along with OCFE (Orthogonal Collocation on Finite Elements), a transient solution for the process was obtained.